Protective Factors for Transgender Adults

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Abstract

Transgender people, or people who do not identify with the gender they were assigned at birth, often experience minority stress as a part of daily life. This stress stems from negative societal attitudes about gender nonconformity, and can have serious mental, physical, financial, and social consequences. However, some transgender people are psychologically resilient and are able to lead healthy, satisfying lives. While it is possible that these people simply experience less stress, it is also possible that there are certain factors at play, called protective factors, which lower risks or cause individuals to be more resilient. Although some studies have identified protective factors for subgroups of the transgender population, no studies have examined general psychological protective factors for transgender adults. The current study investigates possible protective factors using a secondary analysis of data from 108 self-identified transgender individuals who completed an extensive survey online. Findings show that being low in internalized transphobia, having fewer fears of gender-related rejection, and taking steps to transition are associated with more positive mental health outcomes for transgender people. This suggests that that those who have more confidence in their transgender identity are likely to have higher quality of life and self-esteem. Findings also suggest that social support from three major areas (immediate family, extended family, and friends) is associated with more positive mental health outcomes, including higher quality of life, higher self-esteem, lower loneliness, and lower internalized transphobia. Future research is

necessary to explore the ways different protective factors influence one another and the effects of enhancing these factors.

Introduction

The umbrella term "transgender" refers to a wide variety of gender identities and expressions related to a feeling of disconnect with the gender roles and other expectations designated to the individual based on the sex they were assigned at birth. Different identities fall under this broader term, such as female-to-male (FTM) transgender people, or transgender men, and male-to-female (MTF) transgender people, or transgender women (Coleman et al., 2011). Many other variations on gender identity fit under this term as well (e.g., genderqueer, two-spirit; Carroll, Gilroy, & Ryan, 2002; Reis, 2004). Gender diversity exists in many forms across both American and human history, but the concept of transgender identity and experience only rose to prominence in Western culture and scholarship in recent decades (Carroll et al., 2002; Ekins & King, 2006; Reis, 2004).

In order to understand transgender identities and experiences, it is essential to evaluate gender in relation to biological sex, such as chromosomes, hormones, and primary sex characteristics. Among transgender individuals, gender identity usually does not align with biological sex and may be more in line with roles, physical presentation, mannerisms, and other social aspects that the individual understands to be a part of their identity. Most people conceptualize gender as innate, immutable, and natural, aligned neatly with biological sex. However, it is apparent that this perspective is insufficient for thinking about transgender experiences (American Psychiatric Association, 2013).

The American Psychiatric Association (2013) accounts for these understandings of gender by making a distinction between a previous diagnostic label, gender identity disorder (GID), and the new one, gender dysphoria. Before *DSM-5*, mental health professionals diagnosed transgender and gender nonconforming people as having GID, which framed gender identity as the source of clinical problems; however, *DSM-5* states that gender dysphoria (frequently shortened to "dysphoria"), or the distress that accompanies a perceived disconnect between gender identity and assigned gender, is the actual clinical problem (American Psychiatric Association, 2013). Transgender people may seek to reconcile this disconnect through *transitioning*, or making gender identity salient through social, behavioral, medical, and/or legal changes (Coleman et al., 2011). Transitioning can vastly improve individuals' lives by reducing dysphoria and additional distress (American Psychological Association, 2009; Coleman et al., 2011; Grant et al., 2011; Schilt, 2006).

Many transgender people struggle with the changes that may accompany social transition, which could include coming out to family, friends, co-workers, significant others, and teachers, along with transitioning to a different name and pronouns. Despite the initial stress that accompanies these life changes, research with transgender women suggests that being "out" as transgender is associated with lower depression and lower anxiety than hiding one's transgender status (Strain & Shuff, 2010). Some people also choose to transition medically and may require endocrine (hormone) therapy, surgery, or multiple surgeries, and many doctors require at least a brief period of psychological assessment prior to treatment, which can add to costs (Coleman et al., 2011). Financial factors limit the extent to which individuals access therapists, hormones, and especially surgeries.

Unfortunately, genders that fall outside of the conventional concepts of "male" and "female" have historically been stigmatized, resulting in widespread cultural transphobia. Transphobia can be defined as "prejudice, discrimination, and gender-related violence due to negative attitudes toward transgender identity" (Mizock & Lewis, 2008, p. 335). Transphobia may stem from the conviction that transgender people are not "really" the gender they say they are, and transphobic actions often discount the transgender person's identity, sometimes through violence (Carroll & Gilroy, 2002). Transphobic actions and attitudes can cause minor daily problems or even catastrophes for transgender people (Grant et al., 2011; Mizock & Lewis, 2008). The 2011 National Transgender Discrimination Survey (NTDS), which gathered data on experiences of discrimination from a sample of 6,456 transgender and gender nonconforming people, sheds light on the complexity of the structural oppression transgender people face. Respondents experienced discrimination due to gender identity at the hands of landlords, family members, co-workers, partners, teachers and professors, doctors and nurses, police, airport staff, and countless others, spanning both public and private social spheres (Grant et al., 2011). Below is a brief overview of some of the issues facing transgender people in three broad areas: health care, education, and employment.

Access to Health Care

Access to health care is one of the most critical issues facing the transgender community (Kenagy, 2005). Those who wish to transition medically usually have no choice but to utilize health care services, coming into contact with physicians, nurses, endocrinologists, and surgeons (Coleman et al., 2011). Even transgender individuals who choose not to transition medically are likely to require health care services at some point in their lives. However, transgender people are sometimes denied access to health care services, including treatments for cancer or other life-threatening

conditions, simply because they are transgender (Kenagy, 2005; Mizock & Lewis, 2008). Nineteen percent of the respondents to the National Transgender Discrimination Survey were denied treatment due to gender identity, and 13% were denied equal treatment in the emergency room (Grant et al., 2011). In another study, 26% of respondents had been denied care on the basis of gender identity, many of them MTF sex workers (Kenagy, 2005). Even when transgender people receive care, they may find it difficult to receive transgender-specific care from their doctors: 50% of respondents to the NTDS taught their own medical providers about transgender health and medical care (Grant et al., 2011).

Education

Reports on violence and harassment toward transgender people implicate both school-age peers and adults within schools. Among NTDS respondents who expressed their gender identity in school (grades K-12), 78% were harassed, 35% were physically assaulted, and 12% were victims of sexual violence (Grant et al., 2011). Teachers and other school staff were the source of 31% of the verbal harassment, 5% of the physical assault, and 3% of the sexual violence. Another study of MTF and FTM youth between the ages of 15 and 21 found that 71% had been verbally abused by peers and 17% had been physically abused (Grossman, D'augelli, & Frank, 2011). Victimization through bullying has been consistently linked with depression, anxiety, and low self-esteem (e.g. Espelage & Swearer, 2003; Smith, 2004). Additionally, violent victimization in adolescence can reduce educational self-efficacy and investment, leading to a chain effect that lowers performance in school and influences socioeconomic status and the likelihood of unemployment in adulthood (Macmillan & Hagan, 2004).

Employment

Transgender people also face overt discrimination in the job market. A staggering 90% endured direct harassment, mistreatment, or discrimination at work due to gender status or took actions such as concealing their identity to avoid it (Grant et al., 2011). Transgender and gender nonconforming people also reported an unemployment rate twice that of the general population, and transgender people of color experienced unemployment at four times the rate of the general population (Grant et al., 2011). Nearly half (47%) of all NTDS respondents had an adverse job outcome due to gender identity, such as being fired, not hired, or denied a promotion (Grant et al., 2011). Unemployment and poverty are particularly debilitating for transgender people who need to transition medically, as some insurance companies specifically exclude medical gender transition from their policies (Bockting, Knudson, & Goldberg, 2006). NTDS respondents were almost four times as likely as the general population to have a household income of less than $10,000/year and twice as likely to be homeless (Grant et al., 2011).

It is worthwhile to consider the effect of a transphobic environment through the concept of minority stress, which is caused by actual, perceived, or feared experiences of prejudice and discrimination (Meyer, 2003a). Prejudice and discrimination operate at many social levels, including institutionally and interpersonally, and can result in individuals taking on an extra cognitive burden due to stress (Frost & Meyer, 2009). Individuals who have minority status (e.g. gender, race, socioeconomic status) may perceive a difference between their own self-concepts and the influence of dominant culture through these experiences; this persistent, discordant disconnection is at the root of the concept of minority stress (Meyer, 2003b). These negative experiences and expectations can be assumed by the individual and applied to their self-concept, resulting in internalized racism, sexism, or homophobia (Frost & Meyer, 2009); for transgender people, this is referred to as

internalized transphobia. Chronic minority stress is linked with negative effects on both physical and mental health (e.g. Baum, 1990).

Physical health Due to the body's physical reaction to stressors, social stress can have serious physical effects upon the body (e.g. Selye, 1974). Stress can be adaptive, preparing the body for action both mentally and physiologically. However, it is clear that chronic stress is linked with adverse health outcomes (e.g. Baum, 1990). Experiencing chronic stress can result in decreased cardiovascular health (Brannon, Feist, & Updegraff, 2014; Meyer, 2003a; Rozanski, Blumenthal, & Kaplan, 1999). In addition, activation of the sympathetic nervous system due to chronic stress is correlated with activation of the immune system, which, when excessive, can damage immune system function (Brannon, Feist, & Updegraff, 2014). Chronic stress can have additional effects on individuals' mental health, such as increased anxiety, depression, and drug use/dependency (Brannon, Feist, & Updegraff, 2014; Mizock & Lewis, 2008).

Mental health It is important to note that not all transgender people request or require mental health treatment (Coleman et al., 2011). However, a high proportion of transgender people do require some form of mental health treatment in their lifetimes– the suicide attempt rate alone is estimated to be 41% (Grant et al., 2011). Many transgender individuals seek treatment from community-based mental health professionals rather than specialized gender clinics, but there are transgender-specific areas of mental health care clinicians must become familiar with in order to best serve this population (APA, 2009; Bockting, Knudson, & Goldberg, 2006; Carroll et al., 2002; Coleman et al., 2011).

Despite these inflated levels of stress and their associated health risks, many transgender people are psychologically resilient, meaning they overcome difficulties and are able to live satisfying lives

(Grant et al., 2011). While it is possible that some of these people simply experience less stress, it is also possible that there are certain factors at play, called protective factors, that lower risks or cause individuals to be more resilient (Moody & Smith, 2013). Coping skills, strategies employed by an individual to buffer stress, are crucial to psychological resilience (Grossman et al., 2011). Coping skills can act as protective factors that directly impact resilience to life stress, and other factors can influence quality of life indirectly by affecting an individual's coping style. Risk factors might make an individual more likely to develop maladaptive coping skills, while protective factors could improve an individual's ability to cope.

An example of this type of protective factor is social support, which is related to both depression and anxiety. Perceived social support has been shown to be a protective factor for a variety of stigmatized groups (e.g. Clingerman, 2004; McDaniel, Purcell, D'Augelli, 2001; Thomas, 2002). When transgender people lack social support during their transition process, they are more likely to use avoidant coping to deal with stress, which tends to increase depression and anxiety (Budge, Adelson, & Howard, 2013). One study of 55 transgender youth found that social support as in combination with self-esteem and a sense of personal mastery significantly predicted positive mental health outcomes in circumstances where individuals experienced stress (Grossman et al., 2011). Social support from friends and family also protects against suicide in transgender individuals (Mizock & Lewis, 2008; Moody & Smith, 2013). Unfortunately, transphobic attitudes limit the extent to which transgender people receive social support, particularly within family networks (Mizock & Lewis, 2008).

Another protective factor for marginalized groups may be personal confidence in one's identity. One study found that "lesbian confidence," or "trusting for oneself that being lesbian is natural,

good, and of equal value to being heterosexual" to be a significant factor in coping with homophobia (Bjorkman & Malterud, 2012, p. 243). Further, the understanding that discrimination and prejudice stem from social stigma, not inferiority, may buffer against negative effects on self-esteem (Bjorkman & Malterud, 2012; Major & O'Brien, 2005).

Sánchez and Vilain (2009) found that collective self-esteem (as a member of the transgender community) was associated with less psychological distress for male-to-female (MTF) transgender people. Collective self-esteem is esteem related to group membership (Sanchez & Vilain, 2009). In 2011, Healy replicated some of this methodology to extend this research to female-to-male (FTM) transgender people, exploring the relationships between collective self-esteem and forms of transgender minority stress, such as fear related to being transgender, effects and beliefs related to transgender status, and personal self-esteem. He found that the association between a high score on the Collective Self-Esteem Scale and higher levels of mental health was not as strong for FTMs as for MTFs in three of the four subscales, citing cohort differences and gender differences (specifically, different lived experiences of gender) as possible explanations.

This project is a secondary analysis of Healy's (2011) survey data. The goal of this project was to identify and investigate protective factors that may be particularly effective for transgender people.

Preliminary hypotheses predicted that Healy's data would parallel other research findings in this area. Those with high quality of life were predicted to also have high self-esteem. Additionally, those with fewer fears of experiencing gender-related discrimination and rejection, lower internalized transphobia, and lower loneliness were predicted to have higher quality of life and self-esteem (Sjoberg et al., 2006).

In terms of social support hypotheses, perceived familial support was hypothesized to be positively correlated with quality of life and personal self-esteem; it was also hypothesized to be negatively correlated with loneliness and transphobia. This project also explored the relationships between non-familial social support and mental health outcomes, given that NTDS respondents experienced a lack of social support in many spheres. Therefore, perceived support from friends was hypothesized to be positively correlated with quality of life and self-esteem; perceived support from friends was hypothesized to be negatively correlated with loneliness and transphobia.

Confidence in one's identity has also been shown to be a protective factor for stigmatized individuals. Therefore, transgender individuals who are less transphobic, have fewer fears of experiencing gender-related discrimination and rejection, and are more out as transgender were thought to be likely to also have higher quality of life and self-esteem.

Method

Participants

This study was a secondary analysis of data collected for a previous project studying collective self-esteem in transgender adults (Healy, 2011). The participants were people who self-identified as transgender (N = 108; n = 79 assigned female at birth; n = 29 assigned male at birth). All were adults, ranging in age from 18 to 63 years (M = 29.63, SD = 12.25). In addition to providing information about the sex they were assigned at birth, the participants responded to a series of questions about their gender to account for the diversity in how transgender people may understand their own identities. Aside from identifying with the binary identities of male-to-female (MTF) and female-to-male (FTM), participants endorsed a variety of non-binary gender identities, including genderqueer, androgynous, third gender, and two-spirit. The questionnaire collected other

demographic information, including age, race, employment status, and sexual orientation. For specifics, see Table A.

Measures

In Healy's (2011) survey, participants responded to a total of eight different formal scales; however, this paper will only focus on a subset of those scales. Additional questions (independent of the scales) inquired about thoughts and actions concerning their transition, their experiences in different social spheres, and their plans for social or medical transitioning in the future.

Social support aggregate. In order to assess level of social support related specifically to transgender identity, we combined participants' responses to four five-point Likert items from the demographic questionnaire. The first two items asked respondents to rate how often people in the social sphere refer to them with the name they identify with and the gender they identify with. High scores indicated greater usage of the correct name or gender. The next two items asked respondents to rank how often they experienced verbal harassment or had been physically harmed due to gender identity, with higher scores indicating more harassment or harm. These items were reverse-scored, so that a higher score on the final scale would indicate more social support.

Transgender Adaptation and Integration Measure (TG AIM; Sjoberg, Walch, & Stanny, 2006). The TG AIM is designed to measure the extent to which transgender adults adjust to being transgender and is composed of four sections: gender-related fears, psychosocial impact of gender status, coping and gender reorientation efforts, and gender locus of control. It has 15 questions, all of which are four-point Likert items. Sjoberg et al. demonstrated adequate concurrent validity. The gender-related fears subscale showed the highest internal consistency out of the four subscales (α =

.81; Sjoberg et al., 2006); this was the subscale used in this study's regression analyses. High scores indicate greater fear.

Quality of Life Enjoyment and Satisfaction Questionnaire Short Form (Q-LES-Q-SF; Endicott, Nee, Harrison, & Blumenthal, 1993). The Q-LES-Q is a scale designed to measure respondents' quality of life, including the degrees of enjoyment and satisfaction they experience in their daily lives. The items are rated on a 5-point Likert scale, with a higher score being indicative of higher life satisfaction. In order to shorten the length of the full questionnaire, Healy (2011) used the short form (16 items) of the questionnaire, which is the general activities section of the full-length scale; its items cover physical health, subjective feelings, work, household duties, school, leisure activities, and social relationships. The short form has high internal consistency with the full form (αs = .82-.93) and adequate correlation with the other subscales of the long form (rs = .41-.62; Endicott et al., 1993). Higher scores indicate higher quality of life.

Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). The RSE is a widely-used and well-validated measure that utilizes 10 four-point Likert scale items to assess global self-esteem, or how much individuals value and approve of themselves (Richardson, Ratner, & Zumbo, 2009). A higher score indicates higher self-esteem.

UCLA Loneliness Scale (Russell, 1996). The UCLA Loneliness Scale measures loneliness using 20 four-point Likert scale items (Russell, 1996). The version of the scale used in this study was designed to be more readable than previous versions, thus making it more reliable across populations, including the elderly. Coefficient alphas show that the scale is highly reliable across different populations (r = .89-.94; Russell, 1996). The scale also had good test-retest reliability over a one-year period (r = .73; Russell, 1996). Higher numbers indicate that a respondent experiences

feelings related to loneliness, such as isolation from others, more often. The UCLA Loneliness Scale has a strong positive correlation with the Beck Depression Inventory ($r = .52$, $p < .001$) and a strong negative correlation with the Rosenberg Self-Esteem Scale ($r = -.60$, $p < .001$). The authors also report that the scale had a strong, statistically significant negative correlation with measures of satisfaction with social support for college students ($r = -.56$, $p < .001$).

Klein Sexual Orientation Grid (KSOG; Klein et al., 1985). The KSOG is an extended version of the Kinsey scale, designed to better capture the multi-faceted nature of human sexuality and orientation. It has been shown to be a valid and reliable measure (Klein et al., 1985). Respondents identify their past, present, and ideal gender preferences in terms of sexual attraction, behaviors, and fantasies, social and emotional preference, lifestyle, and self-identification. For this study, "past" referred to participants' preferences pre-transition as a means of capturing the variation in sexuality over the course of participants' transitions.

Measurement of Transphobia Scale. This scale was adapted from the Internalized Homophobia Scale (IHS) to measure internalized transphobia in transgender individuals (Healy, 2011). Healy used only some items in order to reduce the length of the full questionnaire. A high score indicates high transphobia.

Procedure

Healy (2011) recruited participants for his online survey from transgender people at the 3rd Annual TransOhio Conference at Ohio State University, a human sexuality class taught at the same university, and through social media (Tumblr, Facebook, and Livejournal). Recruitment involved collecting email lists, passing out flyers, and word-of-mouth. People interested in taking the survey sent an email to the study to receive a link to the consent form and the survey itself. Respondents

completed the survey online sent via email, which was estimated to take approximately 30-45 minutes to complete. By participating, they had the opportunity to enter to win one of eight $25 gift cards (participants did not need to complete the survey to enter the drawing). Each participant was redirected to a debriefing page after exiting the survey. The study had a 75% completion rate.

Results

Preliminary Analyses

It was hypothesized that those with higher quality of life would have fewer fears of experiencing gender-related discrimination and rejection, lower internalized transphobia, lower loneliness, and higher self-esteem. These hypotheses were supported (see Table B). Quality of life (Q-LES-Q-SF) and self-esteem (RSE) were strongly positively correlated [$r\,(98) = .61, p < .001$]. Quality of life was moderately correlated with gender-related fears [$r\,(97) = .43, p < .001$]. Quality of life was moderately associated with lower transphobia [$r\,(96) = -.42, p < .001$] and strongly associated with lower loneliness [$r\,(97) = -.60, p < .001$].

The hypotheses regarding self-esteem parallel those regarding quality of life. These hypotheses were also supported (see Table C). Self-esteem had a moderate positive relation to gender-related fears [$r\,(98) = .44, p < .001$]. The strongest correlation was a negative correlation between self-esteem and loneliness [$r\,(96) = -.74, p < .001$], and there was also a strong correlation between self-esteem and transphobia, such that the higher your self-esteem, the lower your transphobia [$r\,(97) = -.51, p < .001$].

Social Support Models

We hypothesized that individuals who received more support from their friends and family related to their transgender identity would have higher scores on measures of quality of life and

self-esteem. We also hypothesized that individuals who received more support from friends and family would be less lonely and less transphobic. We examined three social spheres: immediate family, extended family, and friends. In order to assess level of social support related specifically to transgender identity, we combined participants' responses to four five-point Likert items. The first two items asked respondents to rate how often people in the social sphere refer to them with the name they identify with and the gender they identified with. High scores indicated greater usage of the correct name or gender. The next two items asked respondents to rank how often they experienced verbal harassment or had been physically harmed due to gender identity, with higher scores indicating more harassment or harm. These items were reverse-scored, so that a higher score on the final scale would indicate more social support. We again used the Q-LES-Q-SF to measure quality of life, the RSE to measure self-esteem, UCLA to measure loneliness, and TPH to measure transphobia. Only the participants with complete data for all items could be included in each regression analysis; Ns are included for each separate analysis. A series of t-tests were used to show that the quality of life and self-esteem scores of the individuals in each group did not differ significantly from the whole sample (see Tables D-F). Table G shows descriptive statistics for the three separate quality of life analyses, Table H shows self-esteem analyses, Table I shows loneliness analyses, and Table J shows transphobia analyses.

Quality of life

The first three models regressed quality of life on level of social support from the three different social spheres. For the model that examined social support from immediate family, complete data were available from 75 participants. The overall model was significant [$F(1, 74) = 7.73$; $R^2 = .08$; $p = .007$]. The extended family model had complete data available from 41

participants and was also significant [$F(1, 40) = 16.86$; $R^2 = .28$; $p < .001$]. The friends model had complete data available from 86 participants and was significant [$F(1, 86) = 11.86$; $R^2 = .11$; $p = .001$]. For more descriptive statistics, see Table G.

Self-Esteem

The next models regressed self-esteem on level of social support from the same three social spheres. Complete data were available from 75 participants for the immediate family model. The overall model was again significant [$F(1, 74) = 9.52$; $R^2 = .10$; $p = .003$]. For the extended family model, 42 participants had complete data. This model was also significant [$F(1, 41) = 15.02$; $R^2 = .25$; $p < .001$]. The friends model had complete data available from 87 participants; however, this model failed to reach significance [$F (1, 86) = 2.84$; $R^2 = .02$; $p = .095$]. For more descriptive statistics, see Table H.

Loneliness

These models regressed loneliness on level of social support from the three social spheres. Complete data were available from 74 participants for the immediate family model. The overall model was significant [$F(1, 73) = 8.85$; $R^2 = .10$; $p = .004$]. For the extended family model, 41 participants had complete data. This model was also significant [$F(1, 40) = 11.31$; $R^2 = .20$; $p = .002$]. 85 participants had complete data for the friends model. This model was significant as well [$F(1, 84) = 9.59$; $R^2 = .09$; $p = .003$]. For more descriptive statistics, see Table I.

Transphobia

73 participants had complete data for the immediate family model. This model was significant [$F(1, 73) = -6.73$; $R^2 = -.07$; $p = .01$]. For the friends model, 85 participants had complete data. This model was also significant [$F(1, 84) = -10.36$; $R^2 = -.10$; $p = .002$]. 40

participants had complete data available for the extended family model; however, this model failed to reach significance. For more descriptive statistics, see Table J.

Identity Confidence Models

We hypothesized that individuals who were less transphobic, had fewer fears of experiencing gender-related discrimination and rejection, and were more out as transgender (i.e., individuals who had more confidence in their transgender identities) would score significantly higher on measures of quality of life and self-esteem. Scores on the Transphobia Scale measured transphobia, and the gender-related fears subscale (TGAIM-GF) of the TG AIM measured participants' fears related to experiencing gender-related discrimination and rejection. In order to measure outness, we calculated the number of years it had been since respondents had taken certain steps toward transitioning, such as using the restroom of the gender they identify with, introducing themselves to strangers with their preferred name, and telling friends and family about gender status. We tested these hypotheses using linear regression models. Due to the exploratory nature and significant reduction in power from combining variables, we considered a p-value of .10 to achieve significance.

Our first model regressed quality of life (Q-LES-Q-SF) on gender fears, outness, and transphobia. Complete data were available from 46 participants. The model was significant [$F(3, 45) = 7.07$; $R^2 = .29$; $p = .001$]. Transphobia was the best predictor ($\beta = -.34$; $t = -2.56$; $p = .01$). Outness made a small contribution to the strength of the model ($\beta = .26$; $t = 1.90$; $p = .06$). Gender-related fears did not make a significant contribution to predictive power. Descriptive statistics are available in Table K.

The second model regressed self-esteem (RSE) on gender fears, outness, and transphobia. Complete data were available from 45 participants. The regression was significant [$F(3, 44) = 9.10$;

R^2 = .36; p < .001]. Again, transphobia was the best predictor (β = -.47; t = -3.57; p = .001). Gender fears made a small contribution to predictive power in the second step of the model (β = -.25; t = -1.85; p = .07). Outness failed to reach significance. Descriptive statistics are available in Table L.

Discussion

For the social support analyses, it was hypothesized that support related to transgender identity from immediate family, extended family, and friends would be predictive of quality of life, self-esteem, loneliness, and transphobia. This hypothesis was partially supported. While each individual social sphere was not predictive of all of the outcome variables, many relationships do suggest a link between social spheres and healthy functioning. Support from immediate family was moderately predictive of quality of life, self-esteem, loneliness, and transphobia; it was also the only area of social support that was predictive of all four outcome variables. It is possible that receiving affirmation from immediate family is related to a particular sense of security around transgender identity, counterbalancing some of the pervasive minority stress that continues to degrade the general health of this population.

Support from friends was predictive of quality of life, loneliness, and transphobia, but not self-esteem. These associations are encouraging; unlike most family members, friends tend to be chosen and can thus be an excellent tool for increasing social support (for example, in debilitating family situations). Further, social media's wide prevalence has made it possible for many isolated people to connect, share their experiences, and to develop friendships. This variable's failure to reach significance in predicting self-esteem could be to be due to global self-esteem's early development and generally stable character by adulthood (Birkeland, Melkevik, Holsen & Wold,

2012); friends are likely to be newer additions to the respondent's social circle compared with family members and may have had less time to become associated with personal self-esteem.

Extended family support was predictive of quality of life, self-esteem, and loneliness, but not transphobia. Of note is its significant prediction of self-esteem, which, as discussed above, is a longer-developing quality. This further strengthens the idea that support present in earlier stages of development may have a lasting positive association with global self-esteem. In support of our hypothesis, extended family's strong association with other outcome variables indicates that this social sphere is indeed relevant to a healthy social network. Its failure to predict transphobia, however, raises the interesting possibility that transgender individuals may be less likely to internalize *negative* views about their identities based on their extended family's views. Extended families are likely to be larger, which increases the probability that at least one person will have a negative view of the transgender individual. It is possible that transgender people are more resistant to negative evaluations from this particular social sphere because they intuitively understand this.

Future research should explore the direct protective effects of increasing dimensions of social support for transgender people. Additionally, it may be valuable to explore the effects of changing specific behaviors related to respectful treatment from family and friends (e.g., correct name and pronoun usage). Future research should also investigate the effects of increasing social support among family members, although this may be difficult to manipulate. For example, studies could examine the effects of providing simple educational introductions on transgender topics to the family members of people who are in the process of coming out. Family members may be better motivated to change their language to include different pronouns or a different name. Some groups, such as the Family Acceptance Project, have already taken the initiative in providing education for

LGBT youth and their families (e.g., Ryan, 2009). Of particular importance for transgender populations may be the effect of support from one's *chosen* family, who may take the place of biological family members who do not accept the transgender individual's identity. Because respondents to Healy's survey were free to define "friends" and "family" as they wished, it is possible that chosen family was categorized differently by the individuals in this study. Explicitly including a category for chosen family members in future studies should solve this issue. Future research should also explore the types of chosen families (e.g., peer groups, mentors) transgender individuals create and how this impacts their effectiveness as protective factors. This is another area where technologies such as social media could be used to connect individuals who may otherwise be unable to interact and learn from one another. For example, Hillier and Harrison (2007) note that LGB adolescents are a marginalized group who have greatly benefited from social media and the internet as tools for exploring and shaping their identities. Future research could examine the effects of applying this concept to transgender individuals.

The results of the identity confidence analyses also suggest potential protective factors for transgender individuals. The three variables included in the models are: time since individuals had taken desired social and medical steps to transition ("outness"), fears of abandonment and discrimination due to gender identity ("gender fears"), and internalized transphobia. It was hypothesized that these variables would predict quality of life and self-esteem; these hypotheses were also partially supported.

Outness, conceptualized as time spent living in congruence with personal gender identity, moderately predicted quality of life in the regression model, but failed to predict self-esteem. This suggests that living in accordance with personal gender identity positively impacts transgender

individuals' quality of life and is a valuable protective factor for this population. However, as previously mentioned, personal self-esteem may be less malleable, since it develops over a much longer period of time. It is possible that living in congruence with your gender identity only shows lasting and durable changes in self-esteem after a much longer period of time; future research could test this concept using a longitudinal study of transgender individuals who choose to transition.

Gender fears moderately predicted self-esteem, but failed to predict quality of life in the regression model. Respondents who have experienced, or who have fears of experiencing, negative reactions to their identity may not hold their identities (or, by extension, themselves) in high esteem; this is correlational, so it may be worthwhile for future research to examine the direction of causality between these variables. It is possible that individuals with low self-esteem have more fears of experiencing abandonment and discrimination due to gender identity; however, fears of abandonment may play a more direct causal role that would become clearer through longitudinal study. Future research could explore this area by collecting information on the sources of transgender individuals' gender fears (for instance, the extent to which individuals have been threatened with or have experienced abandonment and/or discrimination due to gender identity).

Internalized transphobia was clearly the largest contributor to both models, predicting both quality of life and self-esteem and substantially increasing the predictive power of each model. This finding underscores the necessity of addressing negative views individuals hold about their transgender identities. Further, it supports the hypothesis that identity confidence is a protective factor that is linked with more positive outcomes. Future research should examine the effects of increasing identity confidence in transgender individuals and possibly developing interventions and

programs that could engender identity confidence in those who are just beginning to explore their identities as transgender people.

The current study has a number of limitations. This data set utilizes self-report measures, which may lead to inaccuracy due to misreporting, misremembering of events, or other reliability and validity problems. The format of the survey itself may have created confusion, leading to noise in the data. Additionally, the original study did not use screening processes for participants due to the method of data collection (anonymous online survey). It is possible that some respondents did not identify as transgender. The snowball-sampling method used to spread word about the survey may also lower the generalizability of the findings from this sample.

This study is a secondary analysis and is therefore constrained by the measures that were originally included in Healy's questionnaire. The social support aggregate, which was compiled for the purposes of measuring support related to gender identity in this study, has a narrow focus, centralizing usage of correct name and pronouns and levels of abuse related to identity. These items were chosen as a way to approximate levels of acceptance of the transgender individual's identity. However, some individuals may have retained the same name or pronouns, meaning that this aggregate may not have accurately captured the level of support of these individuals' identities. Additionally, this compilation fails to measure many other important elements of social support, such as warmth, concern, and guidance.

While the Measurement of Transphobia Scale was adapted from a measure of internalized homophobia, no research has yet evaluated whether this scale accurately measures internalized transphobia. Researchers have developed and validated at least one scale that measures transphobia among members of the general public (Hill & Willoughby, 2005); however, there is no empirically

validated scale to date that evaluates transphobia specifically among transgender people. Although the findings from this study must be interpreted cautiously, they also show the importance of developing an empirically validated internalized transphobia scale. Social development, including legal advances in protection and representation in the media, has changed everyday experiences for transgender people in recent years. However, as this study suggests, many transgender people will likely continue to hold maladaptive views of their identities. Research on the repercussions of this internalized transphobia and methods of mitigation will therefore continue to be an essential tool for helping transgender people to flourish.

This is particularly true in light of Ohio 17-year-old Leelah Alcorn's suicide, which made national headlines after the young transgender woman posted a suicide note on the social media blogging site Tumblr (Milliken, 2015). Alcorn stated in the note that she had come out to her parents as a transgender woman at the age of 14, but they were unsupportive and refused to accept her identity (Coolidge, 2014). She stated that when she came out as gay two years later to try to soften the concept of being transgender to her parents, her friends supported her, but her parents did not; they removed her from public school and would not allow her to contact friends (Milliken, 2015). When she returned to school five months later, she continued feeling isolated from friends she had not seen in months and unsupported by her parents and church community. She committed suicide on December 28, 2014, by stepping in front of a semi truck on the highway, and also created the post that appeared on her blog (Milliken, 2015). Shortly after Alcorn's suicide, her mother made several statements to the media about the tragedy, using male pronouns and Alcorn's birth name, rather than Leelah (Milliken, 2015). Unfortunately, Alcorn's experiences are not unusual: negative and unaccepting reactions to gender identity are common for transgender people

in the United States and around the world. It is crucial that researchers and clinicians continue to work to understand these issues and develop interventions that educate both the individual and their support system in order to serve as a buffer against the unique stresses that can affect transgender people.

Tables

Demographics

Table A: Demographic information percentages by gender (frequencies in parentheses)

Characteristic	*MTF (n = 29)*	*FTM (n = 79)*
Age		
18-19	0.0 (0)	17.3 (13)
20-29	22.2 (6)	64.0 (48)
30-39	29.6 (8)	9.3 (7)
40-49	11.1 (3)	8.0 (6)
50-59	25.9 (7)	1.3 (1)
60+	11.1 (3)	0.0 (0)
Race		
White (non-Hispanic)	93.1 (27)	77.2 (61)
Multiracial	3.4 (1)	7.6 (6)
Black/African-American	0.0 (0)	7.6 (6)
Asian/Pacific Islander	0.0 (0)	3.8 (3)
Hispanic	3.4 (1)	1.3 (1)
Preferred not to respond	0.0 (0)	2.5 (2)
Employment status		
Full-time	44.8 (13)	26.6 (21)
Part time	6.9 (2)	13.9 (11)
Unemployed	27.6 (8)	16.5 (13)
On disability	6.9 (2)	1.3 (1)
Student	10.3 (3)	41.8 (33)
Retired	3.4 (1)	0.0 (0)
Sexual Orientation		
Queer	21.4 (6)	63.4 (45)
Gay	7.1 (2)	14.3 (10)
Lesbian	46.4 (13)	1.4 (1)
Bisexual	14.3 (4)	22.5 (16)
Heterosexual	14.3 (4)	25.0 (18)

Preliminary Analyses

Table B: Quality of Life Correlational Analyses

	RSE	GF	UCLA	TPH
QOL	.61*	-.43*	-.60*	-.42*
	N = 100	N = 99	N = 99	N = 98

* p < .001

Key: QOL = Quality of Life Enjoyment and Satisfaction Questionnaire Short Form; RSE = Rosenberg Self-Esteem Scale; GF = Gender fears subscale; UCLA = UCLA Loneliness scale; TPH = Transphobia scale

Table C: Self-Esteem Correlational Analyses

	QOL	GF	UCLA	TPH
RSE	.61*	-.44*	-.74	-.51*
	N = 100	N = 100	N = 98	N = 99

* p < .001

Key: RSE = Rosenberg Self-Esteem Scale; QOL = Quality of Life Enjoyment and Satisfaction Questionnaire Short Form; GF = Gender fears subscale; UCLA = UCLA Loneliness scale; TPH = Transphobia scale

Social Support

Table D: T-Test Results for Immediate Family Subgroup

	QOL	RSE
n mean	55.79	28.93
N mean	54.73	28.63
p-value	.40	.69

Key: QOL = Quality of Life Enjoyment and Satisfaction Questionnaire Short Form; RSE = Rosenberg Self-Esteem Scale

Table E: T-Test Results for Extended Family Subgroup

	QOL	RSE
n mean	56.98	29.44
N mean	54.73	28.63
p-value	.18	.37

Key: QOL = Quality of Life Enjoyment and Satisfaction Questionnaire Short Form; RSE = Rosenberg Self-Esteem Scale

Table F: T-Test Results for Friends Subgroup

	QOL	RSE
n mean	54.45	29.44
N mean	54.73	28.57
p-value	.40	.93

Key: QOL = Quality of Life Enjoyment and Satisfaction Questionnaire Short Form; RSE = Rosenberg Self-Esteem Scale

Table G: Social Support Regression Analyses With Quality of Life

	β	t	Significance
Immediate fam.	.31	2.8	.007*
Extended fam.	.55	4.1	.000**
Friends	.35	3.4	.001**

* $p < .01$ ** $p < .001$

Table H: Social Support Regression Analyses with Self-Esteem

	β	t	Significance
Immediate fam.	.34	3.09	.003*
Extended fam.	.52	3.88	.000**
Friends	.18	1.69	.095

* p < .01 ** p < .001

Table I: Social Support Regression Analyses with Loneliness

	β	t	Significance
Immediate fam.	-.33	-2.98	.004*
Extended fam.	-.47	-3.36	.002*
Friends	-.32	-3.10	.003*

* p < .01

Table J: Social Support Regression Analyses with Transphobia

	β	t	Significance
Immediate fam.	.29	2.60	.011*
Extended fam.	.22	1.40	.170
Friends	.33	3.22	.002**

* p < .05 ** p < .01

Identity Confidence

Table K: Identity Confidence Regression for Quality of Life

Factors	β	t	Significance
Gender fears	-.18	-1.29	.205
Outness	.26	1.90	.064*
Transphobia	-.34	-2.56	.014**

* p < .10 ** p < .05

Table L: Identity Confidence Regression for Self-Esteem

Factors	β	t	Significance
Gender fears	-.25	-1.85	.072*
Outness	.10	.74	.462
Transphobia	-.47	-3.57	.001**

* p < .10 ** p < .001

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